EOSC Association – recent developments

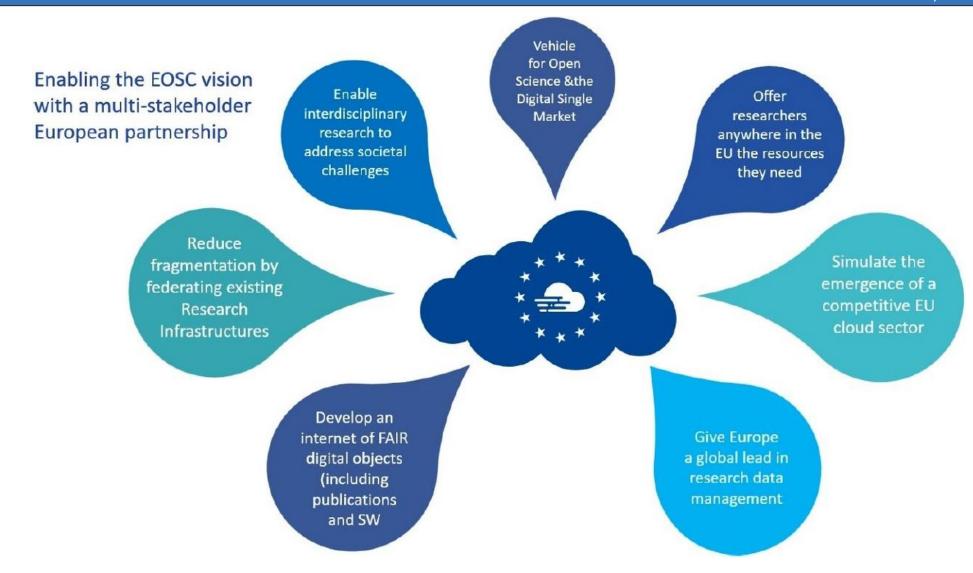




Dragoș-Cătălin Barbu ICI București

EOSC - Vision





EOSC Objectives Tree



Problems	Public & private sectors do not exploit Open Science for improving quality and productivity of research	Researchers do not combine and build upon ever-growing available scientific results	National, European and Global infrastructures do not share Open Science standards and practices
	PEOPLE	DATA	INFRASTRUCTURES
Barriers	Absence of incentives, rewards and skills for open sharing stifles the uptake of Open Science	Scientific results are unfindable, inaccessible, not interoperable, and often used only once	Scientific landscape consists of national and disciplinary research silos and infrastructures
	OPEN	FAIR	FEDERATION
Objectives	Open Science practices and skills are rewarded and taught, becoming the "new normal"	Standards, Tools and Services allow researchers to find, access and reuse results	Sustainable and federated infrastructures enable open sharing of scientific results
	SCIENCE	INDUSTRY	SOCIETY
Benefits	Improved trust, quality and productivity in science	Development of innovative services and products	Improved impact of research in addressing societal challenges

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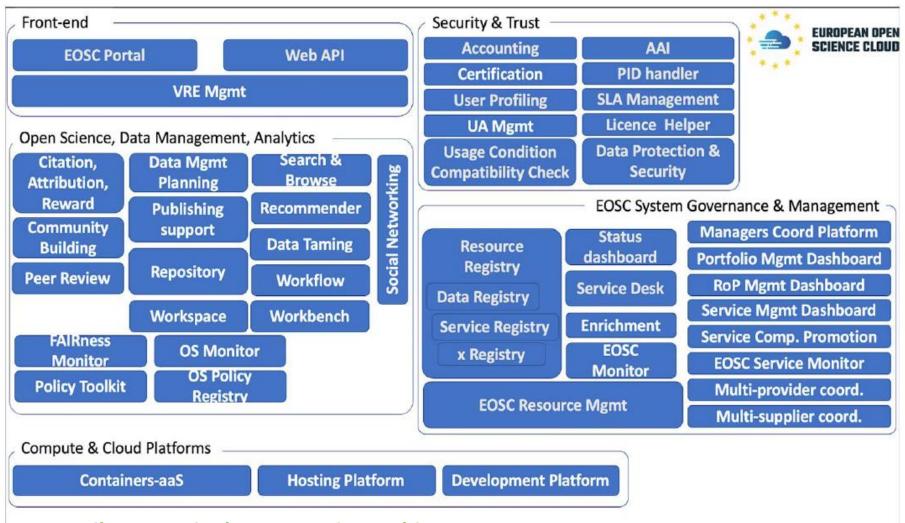
EOSC Pilot Service Architecture



- □ Architecture model developed from an user & functional perspectives
- □ 47 classes of services split in 5 categories
 - □ **Front-end services** for implementing the part of the overall service with which users will interact directly, namely portals or APIs;
 - □ **Security & Trust** aimed at guaranteeing that the overall system (and the services) operate securely and according to standard;
 - □ **Open Science, Data Management, Analytics** aimed at providing their users with user- and open-science-friendly facilities, enabling users to focus on science tasks;
 - **EOSC System Governance & Management** dedicated to supporting the operation and management of the overall EOSC System;
 - □ Compute & Cloud Platforms representing computing resources such as virtual machines and containers (+ connectivity to them) including all platforms and software that do not belong to the other categories.

EOSC Service Architecture





Reference: **EOSC Pilot D5.4 Final EOSC Service Architecture**

EOSC – Governance



- EU countries and countries associated with Horizon 2020, represented in the EOSC Governance Board, agreed unanimously to run the EOSC as a coprogrammed European Partnership under Horizon Europe from 2021
- □ The new governance model agreed with EU countries for the current EOSC implementation phase is tripartite including:



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EOSC Association Mission



- Advancing the EOSC to accelerate the creation of new knowledge, inspire education, spur innovation and promote accesibility and transparency
- □ To provide a single voice for advocacy and representantions for the broader EOSC stakeholder community in Europe
- □ To promote the alignment of European Union research policy and priorities with activities coordinated by the Association (SRIA)
- □To ultimately enable seamless access to data through interoperable services that address the entire research data life cycle, from discovery to storage, management, analysis and re-use across borders and scientific disciplines.

EOSC – Implementation Phases



EOSC phase 1

2018 - 2020

EOSC phase 2

2021 - 2030

H2020 calls/grants approach

EOSC roadmap 2018-2020 by the European Commission

Initial EOSC Governance

- Executive Board (EB)
- Governance Board (GB)

New strategic orientations

Partnership approach in Horizon Europe

EOSC Strategic Research and Innovation Agenda (EOSC SRIA) 2021-2027 by the EOSC community

New EOSC Governance (tripartite)

(increasingly stakeholder-driven, high-level steering role maintained for the European Commission and the Member States) Strategic Research and Innovation Agenda
(SELIA)
date
date
European Open Science Coud (EOSC)
west tricken to
SCIENCE CLOUD

Strategic Research and innovation Agenda for EOSC

- Launch event in Vienna
- EOSC Declaration
 (AT Presidency of the EU)

- Assessment of EOSC Phase 1
- EOSC Declaration (DE Presidency of the EU)



EOSC Implementation



- □ Now 150 members and 60 observers (May 2021)
- □ A european Co-programmed Partnership, between the EC and the EOSC Association, MoU signed on 30 July 2021.

■ Advisory Groups

□ The EOSC Association Advisory Groups are a structure to allow Association members and others to help steer the implementation of EOSC

□ Implementation of EOSC

 PID policy and implementation | Researcher engagement and adoption | Rules of Participation (RoP) compliance monitoring

Metadata and data quality

FAIR metrics and data quality | Semantic interoperability

Research careers and curricula

 Data stewardship curricula and career paths | Research careers, recognition and credit | Upskilling countries to engage in EOSC

Technical challenges on EOSC

AAI Architecture | Infrastructure for quality research software | Technical interoperability of data and services

Sustaining EOSC

Defining funding models for EOSC | Long-term data preservation

Current status of EOSC implementation



- □ Implementation of EOSC Advisory Group is dedicated to address different challenges related to a proper use of the EOSC services and ecosystem at large. **Three task forces** have been set up. All of them will provide input to the next SRIA version.
 - □ The PID Policy and Implementation Task Force (PID TF) is dedicated to identify the gaps in the PID ecosystem that has been mentioned in the current SRIA version, to standardise the PID graph, to integrate PIDs into FAIR data management, and to address PIDs and sensitive data (among others).
 - □ The Researcher Engagement & Adoption Task Force (REA TF) is focused on engaging diverse research communities in order to increase their participation in EOSC. This Task Force explores an aspect that is not part of the current SRIA version and will provide concrete plans to facilitate the onboarding of researchers in the EOSC ecosystem.
 - □ The Rules of Participation & Compliance Monitoring Task Force (RoP TF) will work on providing more practical criteria from the principles expressed in the current high-level EOSC RoP. It aims to define the monitoring process of the different RoPs by setting up a dedicated framework. Based on community involvement, it plans to establish a durable structure to manage the RoP in a sustainable perspective.

Links



□EOSC Association - https://www.eosc.eu/

□EOSC Secretariat - https://www.eoscsecretariat.eu/

- **■EOSC Pilot D5.4 Final EOSC Service Architecture**
- **□**EOSC-hub Technical Architecture v1 (D10.3)



Thank you!

